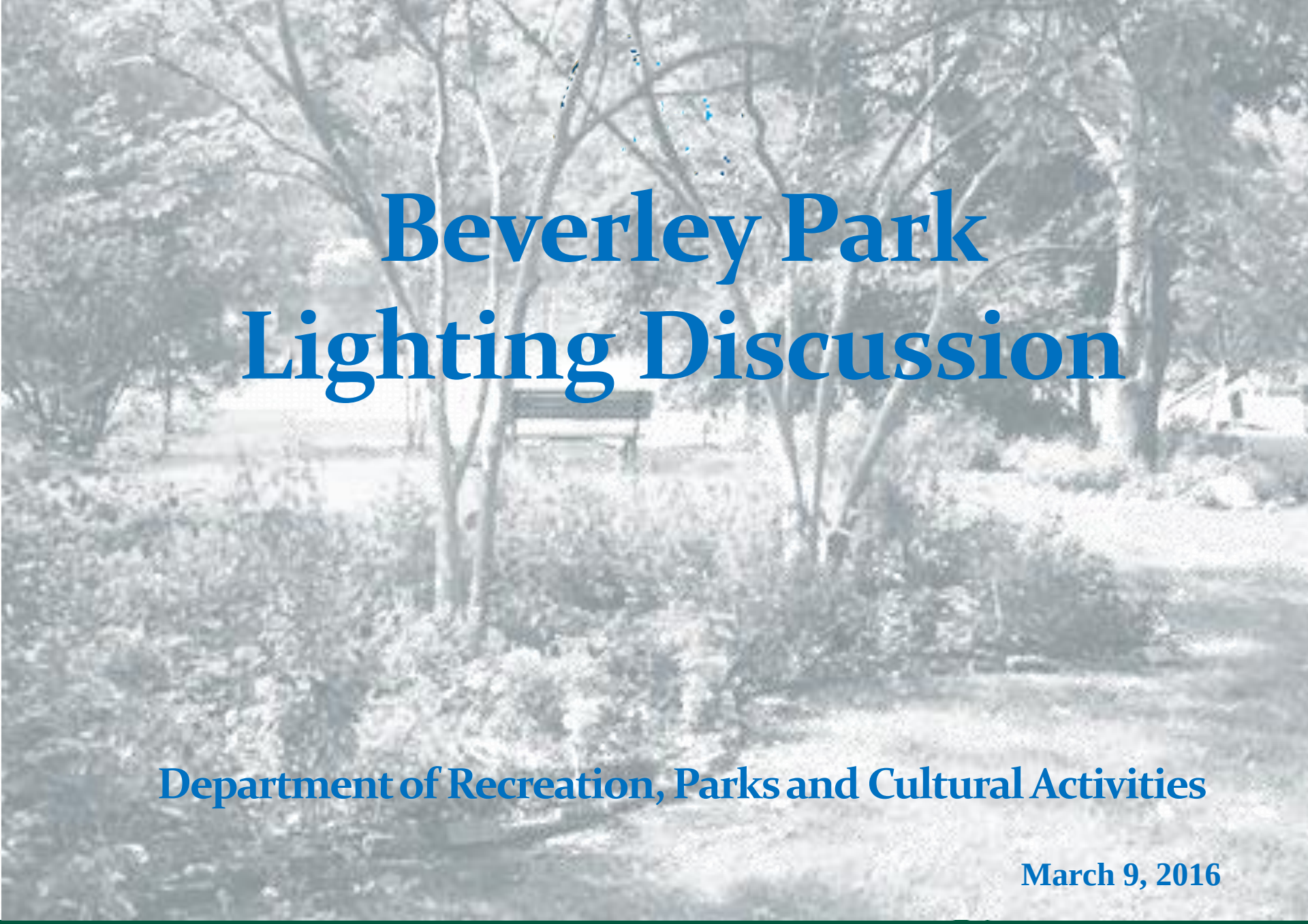


Beverley Park Lighting Discussion

Department of Recreation, Parks and Cultural Activities

March 9, 2016

Beverley Park
2015 Park Improvement Plan

- Park is currently unlit
- Feedback received November-December 2015 during the Park Design process to add lighting to improve security and safety
- Recommendation added to the Beverley Park Concept Plan dated December 29, 2015 (Neighborhood Parks Improvement Plan) :

  Improvement #14: Add park security lighting

The park is closed at dark and currently unlit. Recent incidents have occurred at the park during nighttime hours. Pursuant to an approved Special Use Permit, the addition of security lighting can improve Police surveillance and park security during evening hours. Security lighting is not intended to increase nighttime use of the park, and will be designed to minimize spillover into adjacent properties. The park will continue to remain closed at dark.

- Plan endorsed by the Park and Recreation Commission

City Lighting Requirements

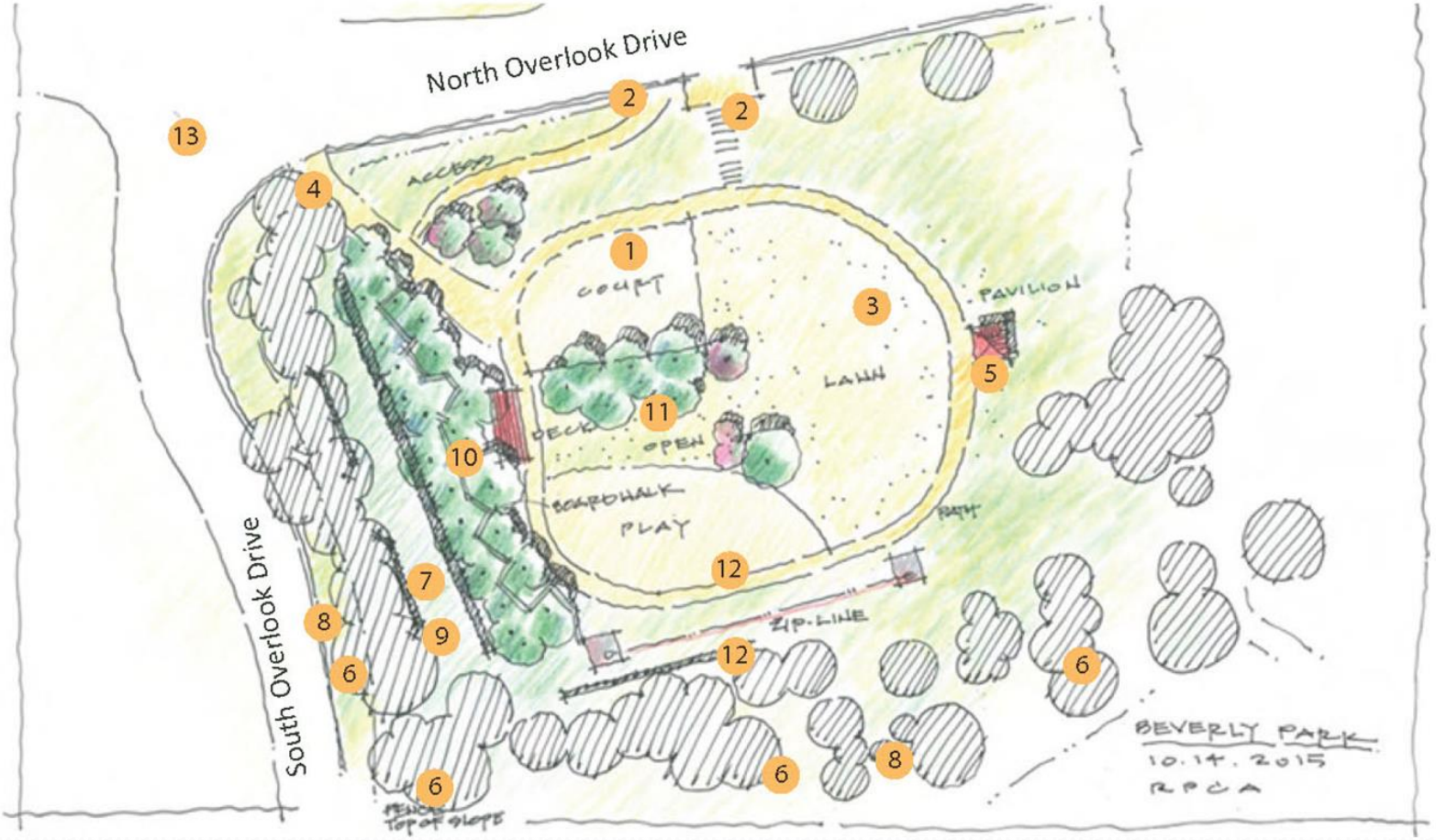
- Special Use Permit (SUP) required for lighting on property zoned Public Open Space (POS), ie. Beverley Park
- Planning Commission and City Council approves SUP. Three months for processing application and public hearings.
- Lighting must be shielded to mitigate impacts to adjoining properties
- Light levels at adjacent properties cannot exceed .25 footcandles
- Lighting must meet minimum City light levels: Typically .60 - 1.0 footcandles for walkways in residential and office areas
- Pole lights cannot exceed 15 feet in POS zones, may be increased to 30 feet with an SUP

Potential Lighting Impacts

- Park Operating hours: Currently sunrise to sunset
- Hours can be changed to 5:00am to 10:00pm with approval by City Manager
- Could attract unintended nighttime use if lights are left on throughout the night
- May require additional Police capacity to enforce park operating hours
- May improve natural surveillance by neighborhood due to longer operating hours, if park hours are extended
- May not prevent every crime from occurring

Area to be Lighted

Area to be Lighted
2015 Improvement Plan



Light Fixture Types
Pole Lights

Pole Light Fixtures—Intermediate Height	
Fixture Height	15’ maximum for POS zones, with SUP 30’
Illumination Characteristics	Due to height, illuminates a larger area more evenly with minimum fixtures, higher lamp wattages
Special Features	Ornamental fixtures, programmable lighting schedules, LED and traditional sodium vapor and halide lamps, double sided heads
Relative Cost	Higher costs due to magnitude of scale, materials, and structural requirements of poles
Constructability	Installation must meet codes for structural stability
Long term Sustainability	Lamps/repairs may require special equipment. Taller height less susceptible to vandalism

Light Fixture Types
Pole Lights

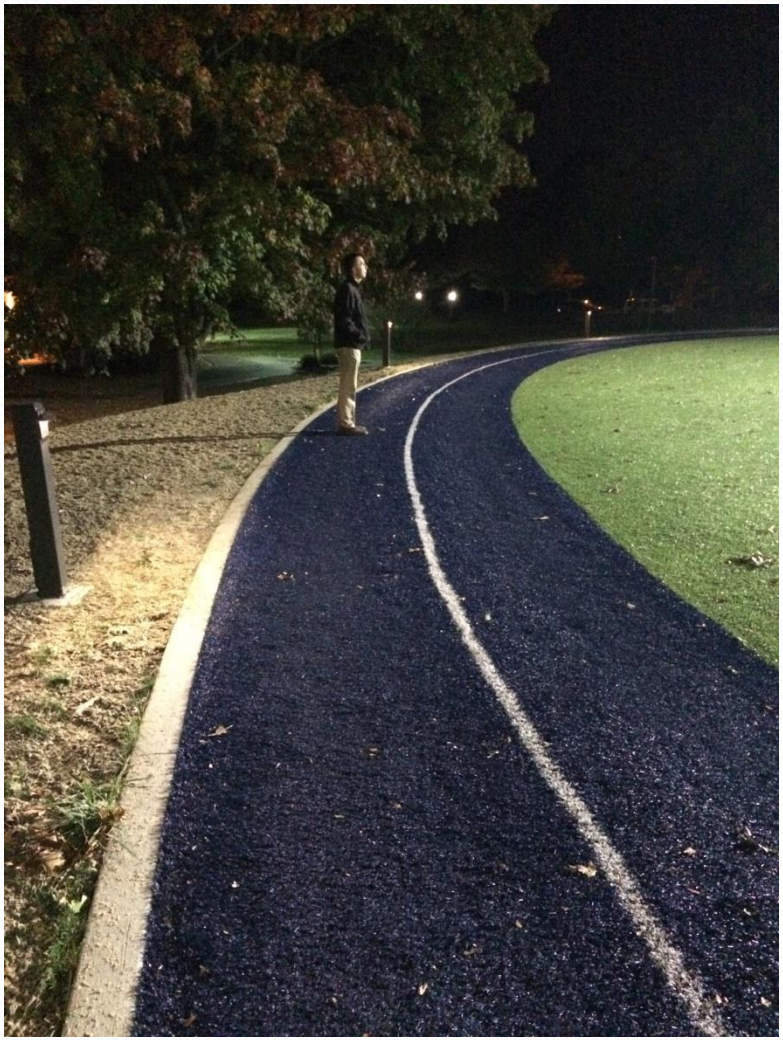
Light Fixture Types
Pole Lights

Light Fixture Types
Bollard Lights

Bollard Light Fixtures—Low Level Landscape	
Fixture Height	Typically 36” or lower, up to 6’
Illumination Characteristics	Used mostly along pathways, depending on location of lamps, lighting typically less uniform, generally low wattage, light directing capabilities, due to low level, glare must be controlled
Special Features	Variety of styles/ornamentation, programmable lighting
Relative Cost	Generally lower cost
Constructability	Generally lower construction costs, however larger quantities may offset savings
Long term Sustainability	Easier to access and replace, must be tamper proof Highly susceptible to vandalism, higher replacement cost

Light Fixture Types
Bollard Lights

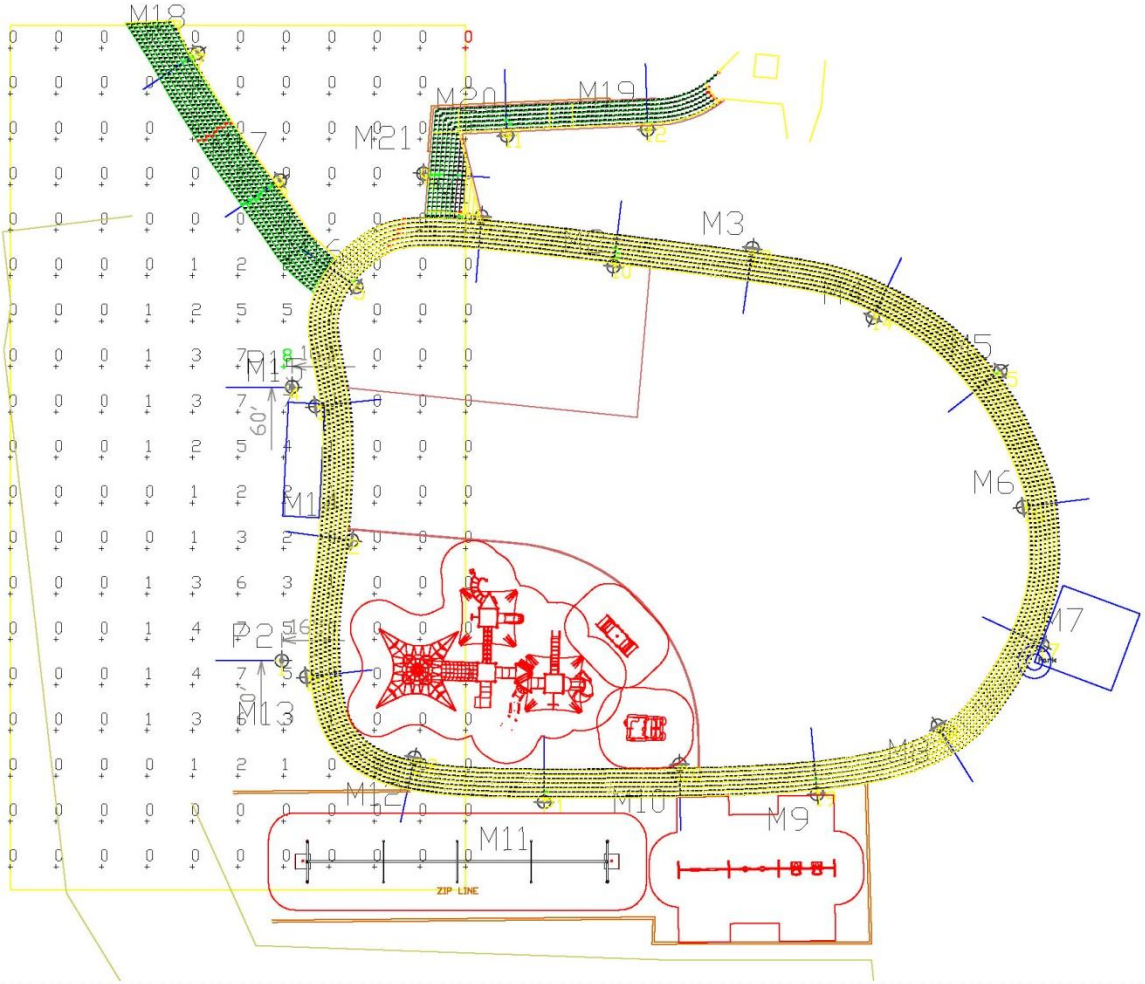
Light Fixture Types
Bollard Lights



LED vs. Incandescent

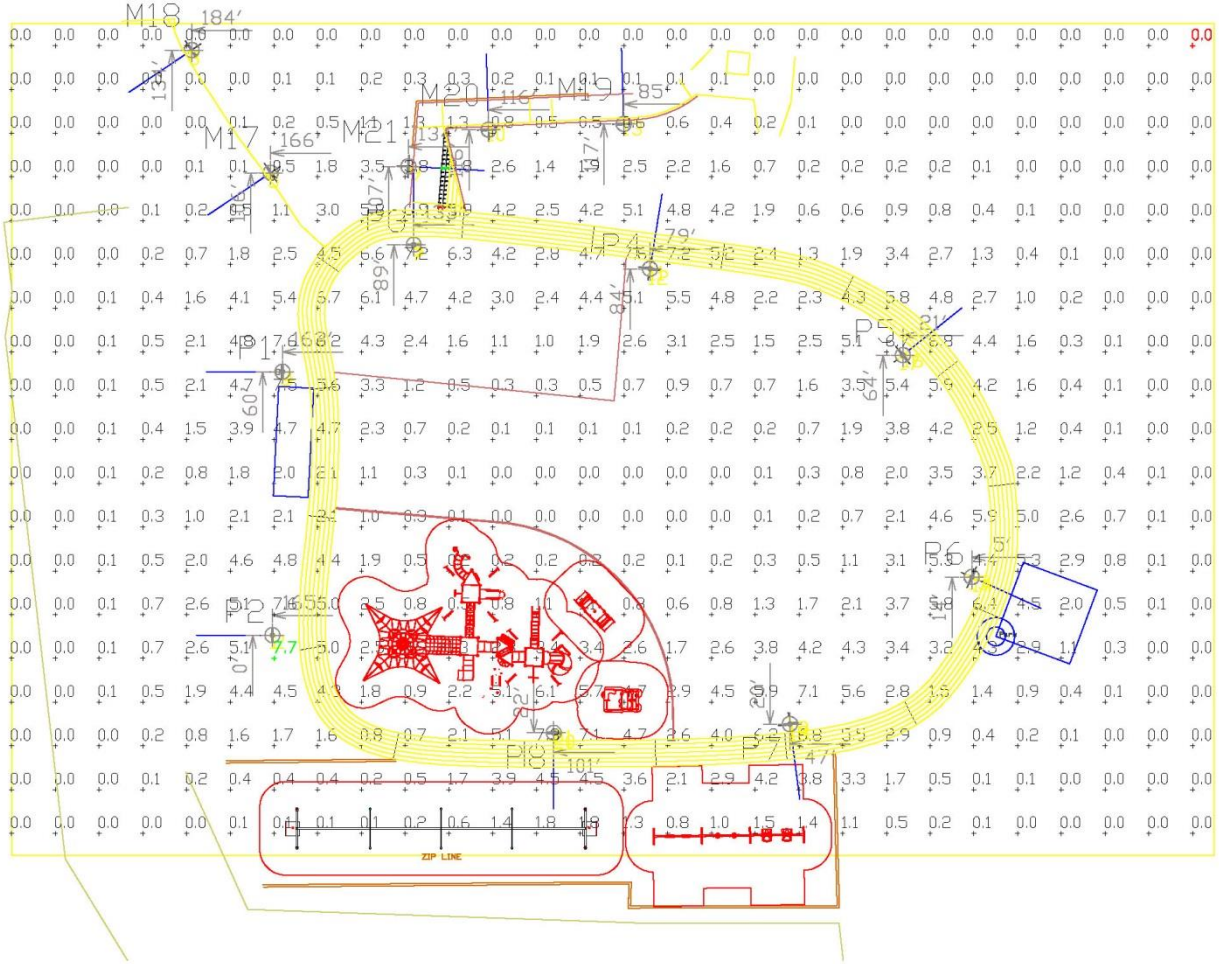
LED vs. Incandescent

Photometric Concept 1



- 21 Bollard fixtures, LED, 30’ spacing
- 2 Pole Lights,18’ H, LED
- 1 LED light mounted to picnic shelter
- Illumination limited to pathways
- Does not illuminate grass areas or slopes
- Estimated cost: $52,000, NIC
  Power transformer

Photometric Concept 2



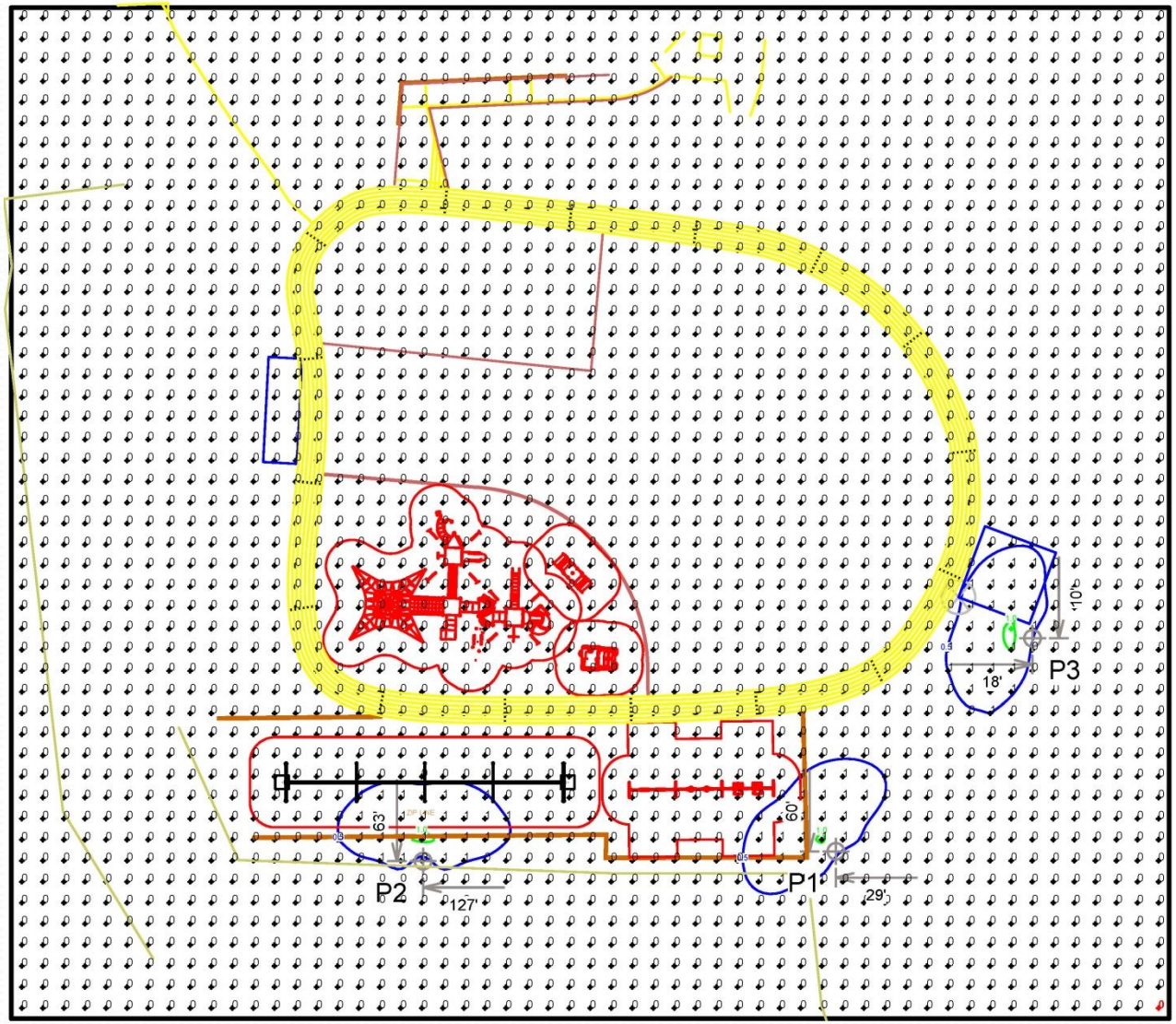
- 8 Pole Lights, 18' H with double fixtures, LED, 55' spacing
- 5 LED bollard lights at entrance paths
- Illumination of turf area
- Partial illumination of slope
- Estimated cost: $70,000-85,000 NIC Power transformer

Feedback from North Ridge Civic Association Lighting Sub-Committee

February 2, 2016

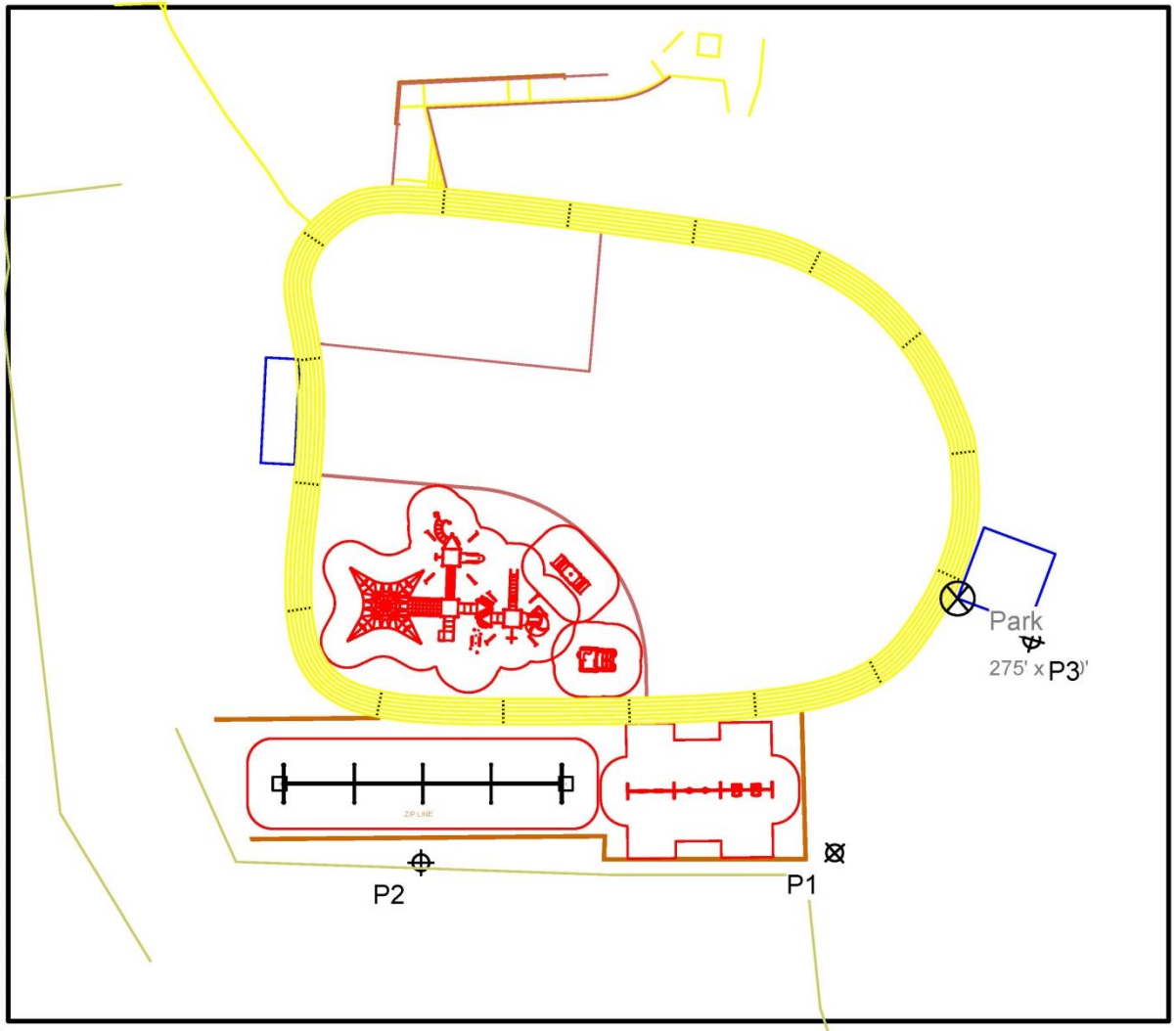
- Light areas of the park that are darkest and furthest away from the street, such that a person could be seen
- Do not light entrances or pathways which could attract nighttime use, or be perceived as “park is open at night”
- Keep lights on throughout the night; and keep park closed at dark
- Bollard fixtures are preferred over pole fixtures
- Lighting level to range from .50 -.60 foot candles
- Warm color temperatures preferred over cool blue temperatures

Photometric Concept 3



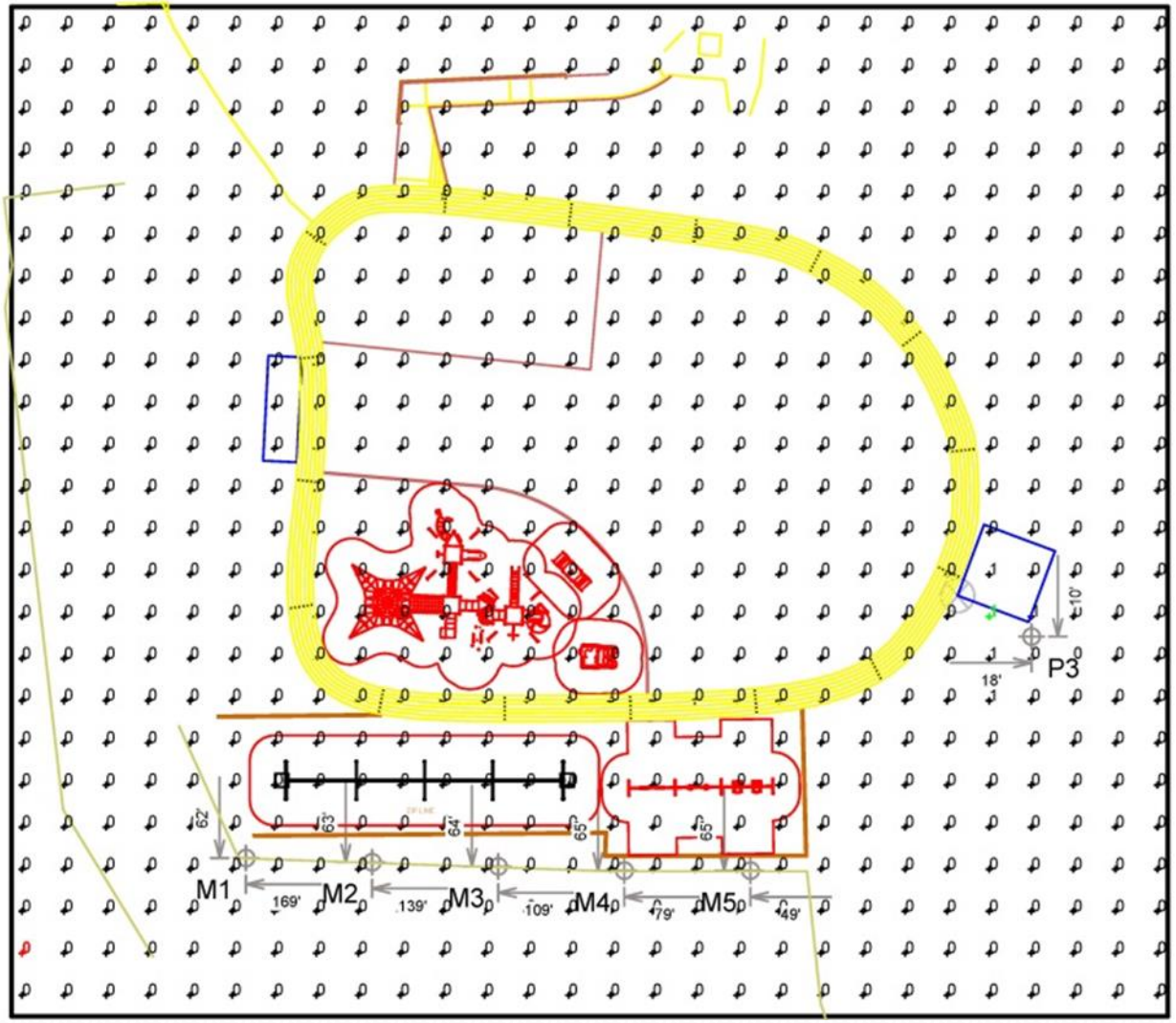
- 3 Pole Lights, 18’ H single fixtures, LED
- 2 Poles located behind play area, 1 Pole located near picnic shelter
- Light intensity shown as 1.0 footcandle, but can be lowered to .50 footcandle.
- Partial illumination of new play areas, and areas furthest away from street
- Costs are substantially lower than Concept 1 and 2

Photometric Concept 3



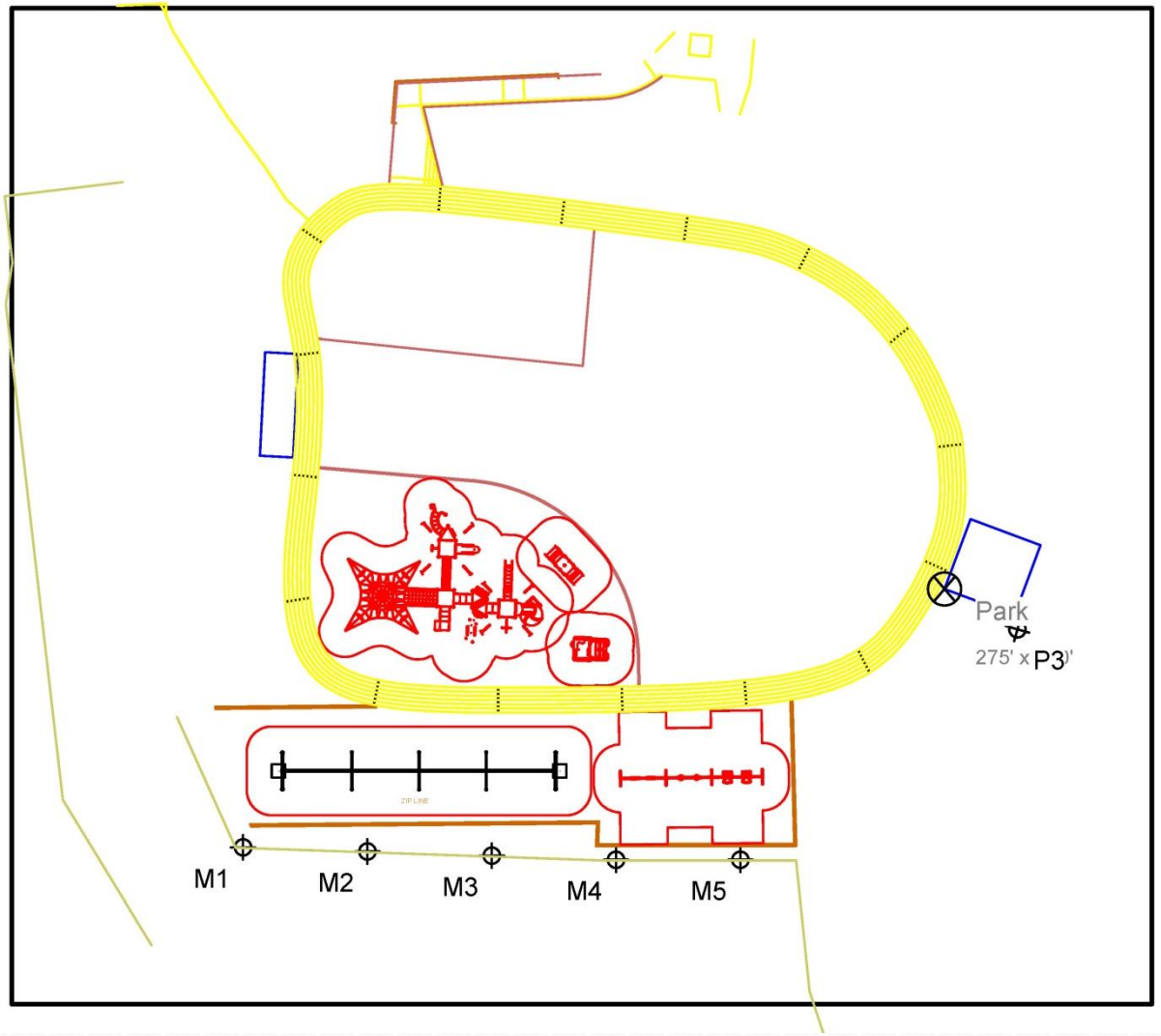
Proposed Light Pole layout

Photometric Concept 4



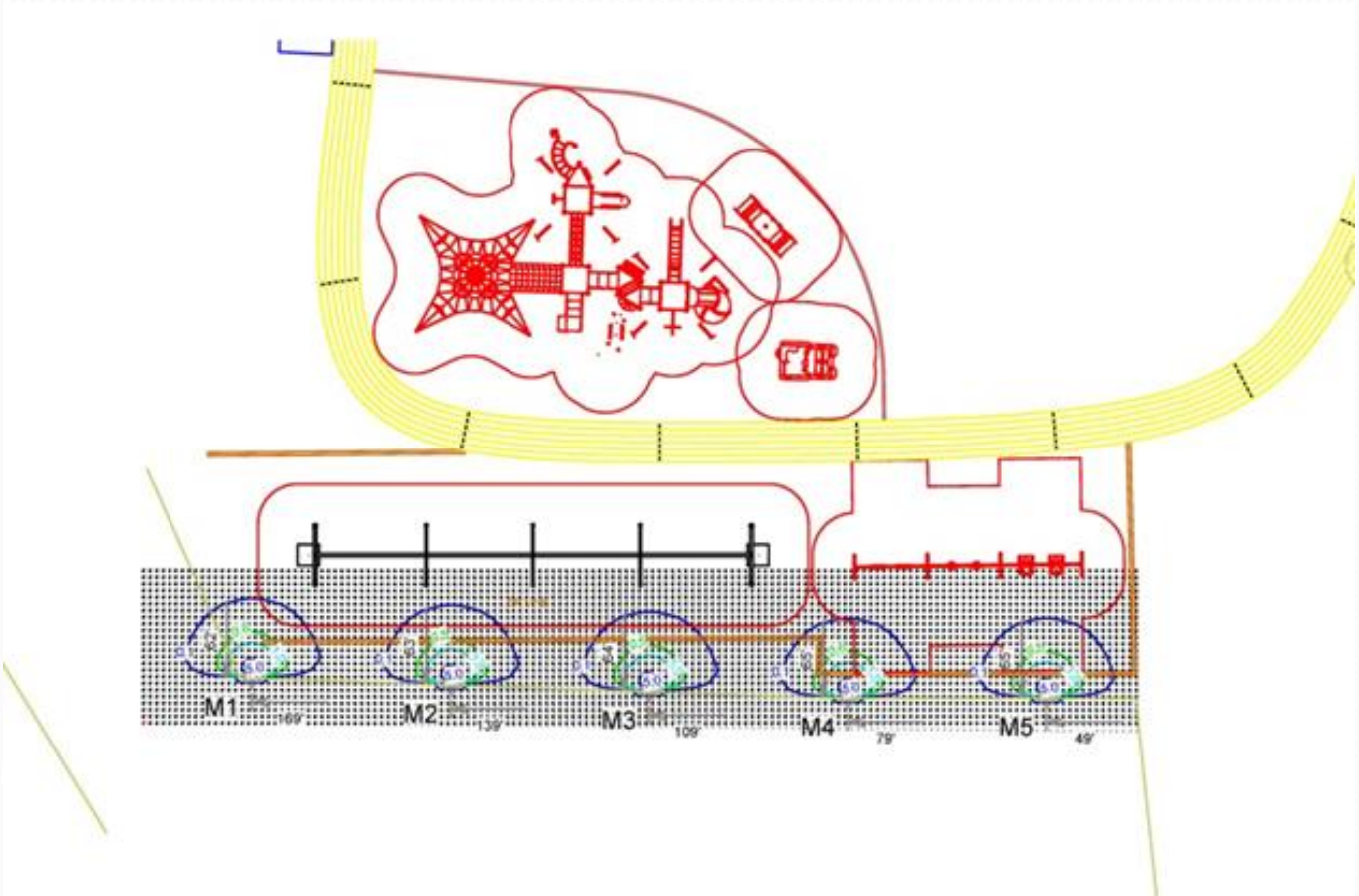
- 5 LED bollard lights located behind play areas
- 1 Pole light located near picnic shelter
- Costs are substantially lower than Concept 1 and 2

Photometric Concept 4



Proposed Bollard and Pole Light layout

Photometric Concept 4



Light levels of Proposed Bollard fixtures

Next Steps

- Obtain feedback on lighting and a preferred concept
- Submit SUP application in March to Planning and Zoning. Planning Commission and City Council hearing anticipated for June 2016
- If approved, install lighting as part of the park renovation construction, anticipated to begin fall 2016.